

CLAIMS:

1. A communication system having at least a base station and a communication device to communicate with the base station, the communication device comprising:
- an RF power amplifier having an RF output for coupling to an antenna and an RF output power control input,
- 5           - a power supply having a power supply terminal, a control input and a power supply output coupled to the RF output power control input for controlling an RF output power on the RF output in dependence on a signal on the control input of the power supply, and
- a data receiver means for coupling to an antenna, the data receiver means
- 10   having a data output for providing data received from the base station, characterised in that said data represents information about said RF output power, and that the communication device further comprises:
- a table means containing a listing of possible power supply control input values related to possible RF output power values, the table means having a table selection
- 15   input coupled to the data output of the data receiver means and a table output coupled to the control input of the power supply for using said RF output power related information to select that power supply control input value in the table means which corresponds to a desired RF output power value.
2. A communication system as claimed in claim 1, wherein the possible
- 20   power supply control input values contained in the table means are also related to an RF output signal frequency at the RF output, and/or to temperature parameters for fine tuning the required RF output power of the RF power amplifier.
3. A communication system as claimed in claims 1 or 2, wherein the table means comprises memory means.
- 25   4. A communication system as claimed in any one of the claims 1 to 3, wherein the communication system comprises a comparator means having a first and a second comparator input for inputting thereto said RF output power related information in the form of the desired RF output power value and an actual RF output power value respectively, and having a comparator output coupled to the RF power control input either

directly, or indirectly through a path including the table means, the latter case also includes the case, wherein the path contains a communication link between the base station and the communication device.

5. A communication system as claimed in claim 4, wherein the comparator  
5 means are included in the base station.
6. A communication system as claimed in claim 4, wherein the comparator  
means are included in the communication device.
7. A communication system as claimed in claim 1, wherein the communicati-  
on device comprises a controllable switch having two switch sides connected to the power  
10 supply terminal and the power supply output respectively, and a control input coupled to the  
data output of the receiver means for closing the controllable switch if the desired RF output  
power is to be maximised.
8. A communication system as claimed in claims 1, wherein the power  
supply comprises a DC/DC converter for down converting the power supply signal, which  
15 signal has the form of a converted supply voltage and which is supplied to the RF output  
control input of the RF power amplifier.
9. A communication device suitable for application in a communication  
system according to any one of the claims 1-8, the communication device comprising:
- an RF power amplifier having an RF output for coupling to an antenna and an  
20 RF output power control input,
  - a power supply having a power supply terminal, a control input and a supply  
output coupled to the RF output power control input for controlling an RF output power on  
the RF output in dependence on a signal on the control input of the power supply, and
  - a data receiver means for coupling to an antenna, the data receiver means  
25 having a data output for providing data to be received from a base station,
- characterised in that said data represents information about said RF output  
power, and that the communication device further comprises:
- a table means containing a listing of possible power supply control input  
values related to possible RF output power values, the table means having a table selection  
30 input coupled to the data output of the data receiver means and a table output coupled to the  
control input of the power supply for using said RF output power related information to  
select that control input value in the table means which corresponds to a desired RF output  
power value.
10. A communication device as claimed in claim 9, wherein the

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